

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Indian Health Service
Rockville, Maryland 20857

INDIAN HEALTH SERVICE CIRCULAR NO. 88-5

VISION SAFETY GUIDELINES

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1. PURPOSE. The purpose of a vision safety program emphasis is:

- A. To reduce the potential of injury to Indian Health Service (IHS) employees working in eye-hazardous tasks or areas;
- B. To comply with Federal law as it applies to occupational safety and health programs for Federal employees;
- c. To reduce the potential for compensation claims against the Federal Government and IHS
- D. To promote safety and efficiency by ensuring that employees have vision capabilities appropriate to their work demands; and,
- E. To prevent ocular contact by staff with infectious hazards from patients.

2. BACKGROUND.

- A. From data obtained in 1980, the National Safety Council estimated eye injuries cost business and industry over \$300,000,000 that year in workers' lost production time, medical bills and compensation. According to a study done in 1974-75 by Alcoa, the direct and indirect costs of a lost workday eye injury was \$14,000. A first aid eye injury cost \$150. Prevention of eye injury is "cost effective" both in terms of money and prevention of pain and suffering. The degree of injury that would go almost unnoticed on other parts of the body may well cost the loss of visual function when the injury occurs to an ocular tissue.

(2. continued)

- B. Public Law 91-596, (Occupational Safety and Health Act of 1970 (OSHA), was implemented to ensure safe work places for employees. The provisions of OSHA, however, exempted Federal agencies from compliance. Subsequently, Executive Order 11612, Occupational Safety and Health Programs for Federal Employees, 26 January 1971, directed the establishment of occupational safety and health programs in all Federal departments and agencies except the Department of Defense. Vision protection was specifically addressed in Title 29, Code of Federal Regulations, Part 1910.133 as follows: "Protective eye and face equipment shall be required where there is a reasonable probability of injury that can be prevented by such equipment. In such cases, employers shall make conveniently available a type of protector suitable for the work to be performed, and employees shall use such protectors. No unprotected person shall knowingly be subjected to a hazardous environmental condition. Suitable eye protectors shall be provided where machines, operations, or patient care present the hazard of flying objects, glare, liquids, injurious radiation, body fluids or a combination of these hazards."
- c. The potential for exposure to hepatitis B virus (HBV) and human immune virus (HIV) in the health-care setting via contamination of the eyes with blood or other body fluids is a serious health-care problem. The Centers for Disease Control recommends the use of protective eyewear or faceshields during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of mucous membranes of the nose, mouth, or eyes. A joint advisory notice from the Department of Labor and the Department of Health and Human Services (DHHS) sent to health care employers in October 1987 recommends the use of personal protective gear in addition to good work practices and engineering controls. The IHS dental program has also mandated the use of eye protection in the dental treatment room and in the dental laboratory to protect the employee from aerosols, splatter, and foreign objects.
3. POLICY. The IHS will establish vision safety guidelines for its employees which will augment and work in concert with existing IHS safety and infection control programs. The IHS may assist tribes in establishing similar programs when requested.
4. PROGRAM.
- A. All areas and functions of each IHS facility and its related activities will be reviewed and examined for potential hazards to the eye on an annual basis. A list of all hazards identified will be formulated and will identify the type of hazard and its location. Appropriate remedial policies and procedures will be developed and implemented.
- B. Each eye hazard identified will be evaluated and where economically feasible, modified to eliminate the hazard.

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- c. Where modification of hazardous operations is not feasible and a hazard remains, each will be minimized through:
1. Placing warning signs and markers on or near hazardous equipment or operations. Such signs should have black letters on a bright yellow background and will indicate that an eye hazard exists and protection must be worn.
 2. Maintain all safety guards on equipment in a functional condition.
 3. Provide and maintain approved plumbed eye wash equipment where chemical splash hazards exist (American National Standards Institute [ANSI] Standard 2358.1-1981).
 4. Provide protective industrial eyewear (prescription or plano) for all employees whose jobs are designated as eye-hazardous (Title 29, Code of Federal Regulations [CFR] 1910.133). Protective eyewear will meet the requirements of ANSI 287.1-1979. This includes dental personnel who previously were allowed to wear ANSI 280.1 Spectacles. Individuals wearing contact lenses in eye hazardous areas must wear covering protection that meets the ANSI 287.1 criterion. In some areas or tasks the wearing of contact lenses may be totally prohibited where use of contact lenses is deemed hazardous by the safety officer. (Note: Spectacles meeting the ANSI 287.1 criterion are not available through military optical labs for Commissioned Corps personnel.) Contact lenses are not to be used if exposure to corrosives, acids, or bases is possible and cannot be worn with full face respirators.
 5. Provide tinted eye shields appropriate to the hazard (arc welding, etc.) where harmful light or radiant energy sources exist (ANSI 287.1-1979).
 6. Ensure that adequate illumination exists in all work areas (41 CFR 101-20.116-2,).
 7. Implement the use of eye protective equipment and measures.
NOTE: As regulations and standards are updated, the new version will be implemented within one calendar year of the update unless otherwise specified in the changed regulation.

5. RESPONSIBILITIES.

A. Service Unit Safety Officer:

1. Conduct, in coordination with an optometrist or ophthalmologist, if available, an annual evaluation of the facility to review and maintain program effectiveness.

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2. Prepare and maintain, in coordination with the optometrist, a list of job titles and/or duties on the facility which require the use of eye protective devices. This list should also contain the vision standard and type of protective equipment required.
3. Monitor that appropriate protective eyewear is available to employees working in eye-hazardous areas.
4. Assist in the selection of non-personal protective equipment and ensure proper placement and usage of such equipment (warning signs, eye wash equipment, equipment safety shields, etc.).
5. Assist department heads in enforcing the proper use of vision safety equipment.
6. Monitor for adequate levels of illumination in work areas.
7. Monitor that annual vision screenings for all personnel designated as working in eye-hazardous areas are done.
8. Investigate the circumstances of any job-related eye injuries and initiate corrective action where indicated.
9. Educate employees in vision safety and the proper use of vision safety equipment.

B. Optometry Department:

1. Provide, in coordination with the Safety Officer, visual performance standards and protective equipment descriptions for the job title list prepared by the Safety Officer.
2. Provide vision screening upon hiring and annually thereafter for all individuals designated as working in eye-hazardous areas. Advise those who fail the vision screening of the need for a full vision examination.
3. Provide vision examinations for employees needing industrial safety spectacles who are eligible for IHS care. Non-eligible employees must provide a spectacle prescription at their own expense.
4. Select, order, inspect, adjust and repair plano and prescription industrial safety spectacles for all employees working in eye-hazardous areas.
5. Maintain records for medico-legal purposes.
6. Assist the Safety Officer in conducting periodic evaluations of the facility-and in reviewing program effectiveness.

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7. When appropriate, act as consultant to the tribal organization in matters concerning vision safety when requested.
8. Provide educational information concerning vision safety and protective equipment upon request of the Safety Officer for employee education.

c. Supervisors:

1. Report any potential eye hazards to the Safety Officer.
2. Notify the Safety Officer of all new employees filling jobs identified as eye-hazardous.
3. Provide appropriate orientation and training for employees filling eye-hazardous jobs.
4. Ensure that protective equipment is present, clean and serviceable.
5. With assistance from the Safety Officer, ensure that protective equipment, safety shields, warning signs, eye wash equipment, etc. are procured and properly placed.
6. Ensure that job descriptions and performance standards reflect the requirement to use and maintain personal protective equipment where appropriate.
7. Enforce the use of recommended vision safety measures.

0. Employees:

1. Utilize vision safety equipment provided.
2. Notify Optometry Department when industrial safety spectacles become unserviceable (damage, poor adjustment, scratched lens, etc.).
3. Notify Supervisor and Safety Officer of all job-related eye injuries.

6. PROCUREMENT.

A. Authority:

"It is the policy of DHEW* to furnish, at government expense, protective clothing and equipment when such is essential for the safety of personnel and the prevention of damage to equipment or property. Items which may be purchased and issued include, but are not necessarily limited to the following: Safety goggles and safety spectacles (plano and -prescription except-for non-eye hazardous job assignments; Rx for prescription glasses to be furnished by employee)"(Para_8-10-10_HEW TN 69.3).

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8. Standards:

All eye safety equipment procured shall conform to the appropriate standard established by the American National Standards Institute.

c. Purchase:

1. Non-prescription eye protection devices 2nd equipment shall be ordered by the appropriate department head utilizing service unit funds. Prepare and forward completed purchase order to the Administrative Officer for purchase. (Note: these devices remain the property of the facility.)
2. Prescription safety and piano spectacles for all authorized personnel shall be ordered by the Optometry Department utilizing service unit funds. Prepare spectacle order form. Prepare and forward completed purchase order with an attached spectacle order form to the Administrative Officer for purchase. (Note: these prescription and piano safety spectacles become the property of employee.)
3. Tinted spectacles shall be procured only when approved by the Optometrist for work where glare or emissions create a safety hazard or medical condition dictates. Tints are rarely authorized for indoor work.

7. REGULATIONS.


- A. Title 29, Code of Federal Regulations, Latest Edition, Part 1910, Occupational Safety and Health Standards.
- B. American National Standards Institute Standard 287.1-1979, Practice for Occupational and Educational Eye and Face Protection.
- c. American National Standards Institute Standard Z358.1-1981- Emergency Eyewash and Shower Equipment.
0. TN 69.3 (7/28/69), Department Staff Manual Safety Management, DHEW.*
- E. BUMEDINST 6910.46, AR40-63, AFT 167-3: (Medical Services, Ophthalmic Services), Department of the Navy, the Army and the Air Force, Washington, D.C. 20350.

8. REFERENCES:

- A. U.S. Army Technical Bulletin, Medical - Occupational Vision (TB MED-506).
- B. U.S. Army TB MED-6, Occupational Health and Safety in Dental Clinics Department of the Army, Washington, D.C., Sept. 30, 1976.

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- C. A.F. Regulation 161-31 (March 1, 1974), Aerospace Medicine, Occupational Vision Program, Department of the Air Force, Headquarters U.S. Air Force, Washington, D.C. 20330.
- D. AFT 127-101 (Sept. 4, 1974), Safety, Ground Accident Prevention Handbook, Department of the Air Force, Headquarters U.S. Air Force, Washington, D.C. 20330.
- E. Self-Evaluation Checklist/Based on OSHA Standards, General Industry, Part 1910, Subpart 1 (Personal Protective Equipment), National Safety Council, 425 North Michigan Avenue, Chicago, Illinois 60611.
- F. Recommendations for Prevention of HIV Transmission in Health-Care Settings, MMWR 1987;36(Supplement 2s). Centers for Disease Control, USPHS, DHHS
- G. Joint Advisory Notice. Department of Labor/Department of Health and Human Services. Federal Register, Vol. 52, No. 210, Friday, October 30, 1987.
- H. Recommended Infection Control Practices for Oral Health Programs Serving Native Americans. Indian Health Service, USPHS, DHHS.


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* NOTE: DHEW is now DHHS